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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/707,537	12/19/2003	Gary A. KNEEZEL	117003	1536
27074 7	7590 03/22/2006		EXAMINER	
OLIFF & BERRIDGE, PLC.			ARANCIBIA, MAUREEN GRAMAGLIA	
P.O. BOX 19928 ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
		•	1763	
			DATE MAILED: 03/22/2006	۵

Please find below and/or attached an Office communication concerning this application or proceeding.

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•	Application No.	Applicant(s)				
	10/707,537	KNEEZEL, GARY A.				
Office Action Summary	Examiner	Art Unit				
	Maureen G. Arancibia	1763				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was a failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on 19 Ja	anuary 2006.					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL. 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.	•					
4a) Of the above claim(s) <u>4-19</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.		•				
6)⊠ Claim(s) <u>1-3</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers		· ·				
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on 19 December 2003 is/a		ted to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f).				
a) All b) Some * c) None of:	s have been received					
1. Certified copies of the priority document2. Certified copies of the priority document		ion No				
3. Copies of the certified copies of the prior						
application from the International Bureau						
* See the attached detailed Office action for a list		ed.				
		•				
•	•					
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) Lanterview Summary Paper No(s)/Mail D	·				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal F	Patent Application (PTO-152)				
Paper No(s)/Mail Date <u>12/03</u> .	6)					

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the invention of Species A in the reply filed on 19 January 2006 is acknowledged. The traversal is on the ground(s) that the subject matter of all species is sufficiently related that a through search for the subject matter of any one species would encompass a search for the subject matter of the remaining species, and that therefore a search and examination of the entire application could be made without serious burden. This is not found persuasive because while the searches for the subject matter of the various species may overlap, there is no reason to expect that those searches would be *coextensive*.

The requirement is still deemed proper and is therefore made FINAL.

- 2. Applicant has identified Claims 1-8 as readable on the elected Species A. The Examiner disagrees. Claims 4-8 are actually drawn to Species C, a method of making the third embodiment of the filter (Figures 6 and 7; Specification, Paragraph 43). This is evident from the fact that Claims 4-8 require forming at least some of the first and second passages such that they extend completely through the first substrate, as well as requiring a third substrate to be placed adjacent to the outer surface of the first or second substrate.
- 3. The Examiner also notes in regards to Claims 2 and 3 that the elected Species A requires that the first, second, and third passages be formed using an orientation-dependent etching technique. (Figures 2 and 3; Specification, Paragraphs 40-41) This limitation of Claims 2 and 3 will be examined. The recited limitation of forming the

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passages by reactive ion etching corresponds to non-elected Species B, and will not be examined at this time. Moreover, for future reference, the Examiner notes that the recited limitation in Claims 2 and 3 of a non orientation-dependent etching technique (which will not be examined at this time) does not appear to have support in the Specification.

4. Claims 4-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 19 January 2006. Claims 1-3 are drawn to the elected Species A, and will be examined.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "130" has been used to designate both the upper substrate and the passages in the upper substrate in Figure 2. The reference character designating the upper substrate should be corrected to "140". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,612,554 to Poleshuk.

In regards to Claims 1-3, Poleshuk teaches a method of manufacturing, comprising providing first and second substrates 28; forming a plurality of first and second passages 29 in the first substrate and a plurality of third passages 29 in the second substrate using an orientation-dependent etching technique (Figure 6; Column 9, Lines 50-62); and placing the first and second substrates 40 adjacent to each other (Figure 3 and 7; Column 7, Lines 12-45), such that the plurality of third passages extend between the first and second passages.

The third passages would necessarily fluidly connect the first and second passages such that particles having a size greater than that which can pass through the third passages are filtered from the fluid when the fluid flows through the first passages, into and through the third passages, and into the second passages. This would be inherently the case with the structure taught by Poleshuk, due to residual cross talk between the passages. (isolation of the channels is "adequate;" Column 7, Lines 33-42)

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In other words, while the substrates 28 are etched to be "substantially identical" (Abstract, Lines 1-2; Claim 1), the discrepancies between the substrates would leave a small gap between the opposed sloping sides of the passages, leaving room for only the smallest fluid (ink) particles to flow between the passages. Larger fluid (ink) particles would be unable to pass, and therefore would be "filtered" as broadly recited in the claim. This rejection is based on the fact the structure formed by the method of Poleshuk will inherently perform in the manner recited the Applicant. When a rejection is based on inherency, a rejection under 35 U.S.C. 102 or U.S.C. 103 is appropriate. (See *In re Fitzgerald* 205 USPQ 594 or MPEP 2112).

The Examiner notes that the preamble recitation in Claim 1 that the method manufactures an *internal filter* does not further limit the claim, and is of no significance to claim construction. It has been held that if the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention (as is the case here), and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

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from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/707,535 ('535).

Although the conflicting claims are not identical, they are not patentably distinct from each other because while Claim 1 of '535 is a product claim, it recites all of the limitations of Claim 1 of the instant application substantially as claimed.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 2 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/707,535 in view of Poleshuk.

In regards to Claims 2 and 3, Claim 1 of '535 does not recite that the first, second, and third passages are formed by using an orientation-dependent etching technique.

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Poleshuk teaches that first, second, and third passages 29 in first and second substrates 28 are formed using an orientation-dependent etching technique (Figure 6; Column 9, Lines 50-62)

It would have been obvious to one of ordinary skill in the art to form the first, second, and third passages recited by Claim 1 of '535 using an orientation-dependent etching technique, as taught by Poleshuk. The motivation for doing so, as taught by Poleshuk (Column 9, Lines 50-62), would have been to form controllably form passages with sloped walls at a set angle.

This is a provisional obviousness-type double patenting rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen G. Arancibia whose telephone number is (571) 272-1219. The examiner can normally be reached on core hours of 10-5, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maureen G. Arancibia **Patent Examiner**

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Parviz Hassanzadeh Supervisory Patent Examiner Art Unit 1763